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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,346	10/24/2003	M. Khaledul Islam	555255012610	2718

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EXAMINER	
ALAM, FAYYAZ	

ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/693,346	ISLAM ET AL.	
	Examiner	Art Unit	
	Fayyaz Alam	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/13/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement submitted on 9/13/2004 been considered by the Examiner and made of record in the application file.

Preliminary Amendment

2. The present Office Action is based upon the original patent application filed on 10/24/2003 as modified by the preliminary amendment filed on 9/13/2004. **Claims 1 - 35** are now pending in the present application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 - 5 are rejected under 35 U.S.C. 102(e) as being anticipated by **Feder et al. (U.S. Application # 2004/0142693)**.

Consider **claim 1**, Feder et al. disclose a method of selecting a system (read as base station transceiver system; see abstract) in a mobile station comprising:

scanning the environment for available communication systems (read as base station transceiver system; see abstract) to provide service for the mobile station;

checking (read as identifying) each available system (read as base station transceiver system) detected in step S10 (see figure 2), to a list of allowable systems in the mobile client (read as mobile station; see [0020]) and determine if the systems are valid according to a Service Level Agreement or SLA from the primary service provider (read as identifying a base station that provides a predetermined service and by default identifying base station that fail to provide the predetermined service; [0020 - 0021]); and

selecting a 3G system (read as first base transceiver station) over WLAN system (read as second base transceiver station) since SLA from the service provider prefers a 3G system (read as second base transceiver station fails to provide the predetermined service; [0052]). A preference level is set by the service provider, which prefers a 3G system (based on data rate, signal quality, etc.; see [0059 - 0068]) to any other system and is hereby construed as selecting a first base station since the second base station fails to provide the predetermined service.

Consider **claim 2** as applied to claim 1, Feder et al. disclose that the SLA preference from the service provider prefers a 3G service (read as predetermined communication service; 0052]).

Consider **claim 3** as applied to claim 1, Feder et al. disclose a set of ranges for E_c/I_o measurements (read as signal quality; [0059]) and based on the ranges, system (read base station) priorities are set as "High", "Medium", and "Low" (see [0059 - 0068])

and thus a system is selected (read base station). In addition, Feder et al. further disclose a rule table (see [0073] and table 3) to store in the mobile client to select a system that is a 3G system (read as first system) when there is a choice between a $3G_{LOW}$ and an 802.11_{LOW} (read as second base station). For clarity, referring to paragraph [0062] if the E_c/I_o measurement is -9dB (read as better than a minimum threshold) for a 3G system (read as first base station) and -7dB for a 802.11 system (read as second base station) while being in the same range "LOW" a 3G system will be selected based on rule table 3 even though the signal quality is better for the 802.11 system.

Consider **claims 4 and 5** as applied to claim 1, Feder et al. disclose that a user initially subscribes and then receives a preference rule update from the primary service provider (see [0054]). Therefore the mobile station could be subscribed to any system or network, 3G or 802.11 (read as predetermined service) initially. Then once the preference rules are stored in the mobile station the mobile can connect to a 3G system (read as first base station) according to the rules in table 3 where a 3G system is selected even when the E_c/I_o measurement (read as signal quality) is better or worse than the initial system or network (see [0059 - 0068] and table 3).

Claim Rejections - 35 USC § 103

a. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feder et al. (U.S. Application # 2004/0142693)** as applied to claims above, and further in view of **Einola et al. (International Publication # 01/22764)**.

Consider **claim 6** as applied to claim 1, Feder et al. fail to disclose acts of producing and sending a list of one or more handoff candidate identifiers to a serving base station transceiver system which excludes an identifier for the second base station transceiver system.

In the related field of endeavor, Einola et al. disclose sending a CLASSMARK UPDATE message (read as list of handoff candidate identifiers) from the MS (16) (read as mobile station) to the BSC (18) (read as base station), which would exclude a list of networks not eligible for handover according to a set of preferences (read as second base station failing to provide predetermined communication service; see pg. 12, lines 1 - 33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. with the teachings of Einola et al. in order to assist the base station in the handover process and reduce the burden of processing at the mobile station.

Consider **claim 7**, Feder et al. disclose a method of selecting a system (read as base station transceiver system; see abstract) in a mobile station comprising:

scanning the environment for available communication systems (read as base station transceiver system; see abstract) to provide service for the mobile station;

checking (read as identifying) each available system (read as base station transceiver system) detected in step S10 (see figure 2), to a list of allowable systems in the mobile client (read as mobile station; see [0020]) and determine if the systems are valid according to a Service Level Agreement or SLA from the primary service provider (read as identifying a base station that provides a predetermined service and by default identifying base station that fail to provide the predetermined service; [0020 - 0021]).

Feder et al. fail to disclose producing and sending a list of one or more handoff candidate identifiers to a serving base station transceiver system which excludes an

identifier for at least one base station transceiver system based on its failure to provide the predetermined digital communication service.

In the related field of endeavor, Einola et al. disclose sending a CLASSMARK UPDATE message (read as list of handoff candidate identifiers) from the MS (16) (read as mobile station) to the BSC (18) (read as base station), which would exclude a list of networks not eligible for handover according to a set of preferences (read as second base station failing to provide predetermined communication service; see pg. 12, lines 1 - 33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. with the teachings of Einola et al. in order to assist the base station in the handover process and reduce the burden of processing at the mobile station.

Consider **claim 8** as applied to claim 7, Feder et al. that the SLA preference from the service provider prefers a 3G service (read as predetermined communication service; 0052]).

Consider **claim 9** as applied to claim 7, Feder et al. fail to disclose the predetermined digital communication service comprises a Second Generation (2G) communication service.

In the related field of endeavor, Einola et al. disclose a GSM service (read as second-generation communication service; see pg. 11, lines 23 - 34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. with the

teachings of Einola et al. in order to provide handoff service to and from existing 2G service and not render the 2G wireless communication network obsolete which would be a waste of resources.

Consider **claim 10** as applied to claim 7, Feder et al. fail to disclose that the list is sent as part of one of an origination message, a page response message, and a pilot strength measurement message.

In the related field of endeavor, Einola et al. disclose CLASSMARK UPDATE message (read as one of origination message or page response message; see pg. 12, lines 21 - 26).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. with the teachings of Einola et al. in order to use an existing technique to conserve resources.

Claims 11 - 15, 17, 23 - 27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feder et al. (U.S. Application # 2004/0142693)** in view of **Pecen et al. (U.S. Publication # 2004/0097233)**.

Consider **claims 11 and 23** Feder et al. disclose a method of selecting a system (read as base station transceiver system; see abstract and figure 1) in a mobile station comprising:

scanning the environment for available communication systems (read as base station transceiver system; see abstract) to provide service for the mobile station;

checking (read as identifying) each available system (read as base station transceiver system) detected in step S10 (see figure 2), to a list of allowable systems in

the mobile client (read as mobile station; see [0020]) and determine if the systems are valid according to a Service Level Agreement or SLA from the primary service provider (read as identifying a base station that provides a predetermined service and by default identifying base station that fail to provide the predetermined service; [0020 - 0021]); and

selecting a 3G system (read as first base transceiver station) over WLAN system (read as second base transceiver station) since SLA from the service provider prefers a 3G system (read as second base transceiver station fails to provide the predetermined service; [0052]). A preference level is set by the service provider, which prefers a 3G system (based on data rate, signal quality, etc.; see [0059 - 0068]) to any other system and is hereby construed as selecting a first base station since the second base station fails to provide the predetermined service.

Feder et al. fail to disclose a controller, radio frequency (RF) transceiver circuitry coupled to the controller, the RF transceiver circuitry including a receiver and a transmitter, and the mobile station using the controller and the RF transceiver circuitry to select a base station transceiver system for communication.

In the related field of endeavor, Pecen et al. disclose a mobile station in a wireless communication system comprising a controller (206) and an RF transceiver (204) in the mobile station (see figure 2) to control the selection of a cell (see abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. with the teachings of Pecen et al. in order to provide a hardware system to carry out the method.

Consider **claims 12 and 24** as applied to claims 11 and 23, Feder et al. disclose that the SLA preference from the service provider prefers a 3G service (read as predetermined communication service; 0052]).

Consider **claims 13 and 25** as applied to claims 11 and 25, Feder et al. disclose a set of ranges for E_c/I_o measurements (read as signal quality; [0059]) and based on the ranges, system (read base station) priorities are set as "High", "Medium", and "Low" (see [0059 - 0068]) and thus a system is selected (read base station). In addition, Feder et al. further disclose a rule table (see [0073] and table 3) to store in the mobile client to select a system that is a 3G system (read as first system) when there is a choice between a $3G_{LOW}$ and an 802.11_{LOW} (read as second base station). For clarity, referring to paragraph [0062] if the E_c/I_o measurement is -9dB (read as better than a minimum threshold) for a 3G system (read as first base station) and -7dB for a 802.11 system (read as second base station) while being in the same range, "LOW", according to paragraph [0062], a 3G system will be selected based on rule table 3 even though the signal quality is better for the 802.11 system.

Consider **claims 14 - 15 and 26 - 27** as applied to claims 11 and 23, Feder et al. disclose that a user initially subscribes and then receives a preference rule update from the primary service provider (see [0054]). Therefore the mobile station could be subscribed to any system or network, 3G (first base station) or 802.11 (second base station) (also read as predetermined service) initially. Then, once the preference rules are stored in the mobile station the mobile can connect to a 3G system (read as first base station) according to the rules in table 3 where a 3G system is selected even when

the E_c/I_o measurement (read as signal quality) can be better or worse than the initial system or network (see [0059 - 0068] and table 3).

Consider **claims 17 and 29** as applied to claims 11 and 23, Feder et al. disclose various 3G systems including cdma2000 (see [0016]).

Claims 16, 18 - 22, 28, 30 - 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feder et al. (U.S. Application # 2004/0142693)** in view of **Pecen et al. (U.S. Application # 2004/0097233)** as applied to claims above, and further in view of **Einola et al. (International Publication # 01/22764)**.

Consider **claims 16 and 28** as applied to claims 11 and 23, Feder et al. as modified by Pecen et al. fail to disclose acts of producing and sending a list of one or more handoff candidate identifiers to a serving base station transceiver system which excludes an identifier for the second base station transceiver system.

In the related field of endeavor, Einola et al. disclose sending a CLASSMARK UPDATE message (read as list of handoff candidate identifiers) from the MS (16) (read as mobile station) to the BSC (18) (read as base station), which would exclude a list of networks not eligible for handover according to a set of preferences (read as second base station failing to provide predetermined communication service; see pg. 12, lines 1 - 33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. as modified by Pecen et al. with the teachings of Einola et al. in order to assist the base station in the handover process and reduce the burden of processing at the mobile station.

Consider **claims 18 and 30**, Feder et al. disclose a method of selecting a system (read as base station transceiver system; see abstract) in a mobile station comprising:

scanning the environment for available communication systems (read as base station transceiver system; see abstract) to provide service for the mobile station;

checking (read as identifying) each available system (read as base station transceiver system) detected in step S10 (see figure 2), to a list of allowable systems in the mobile client (read as mobile station; see [0020]) and determine if the systems are valid according to a Service Level Agreement or SLA from the primary service provider (read as identifying a base station that provides a predetermined service and by default identifying base station that fail to provide the predetermined service; [0020 - 0021]).

Feder et al. fail to disclose a controller, radio frequency (RF) transceiver circuitry coupled to the controller, the RF transceiver circuitry including a receiver and a transmitter, and the mobile station using the controller and the RF transceiver circuitry to select a base station transceiver system for communication.

In the related field of endeavor, Pecen et al. disclose a controller (206) and an RF transceiver (204) in the mobile station (see figure 2) to control the selection of a cell (see abstract).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. with the teachings of Pecen et al. in order to provide a hardware system to carry out the method.

Feder et al. as modified by Pecen et al. fail to disclose producing and sending a list of one or more handoff candidate identifiers to a serving base station transceiver

system which excludes an identifier for at least one base station transceiver system based on its failure to provide the predetermined digital communication service.

In the related field of endeavor, Einola et al. disclose sending a CLASSMARK UPDATE message (read as list of handoff candidate identifiers) from the MS (16) (read as mobile station) to the BSC (18) (read as base station), which would exclude a list of networks not eligible for handover according to a set of preferences (read as second base station failing to provide predetermined communication service; see pg. 12, lines 1 - 33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. as modified by Pecen et al. with the teachings of Einola et al. in order to assist the base station in the handover process and reduce the burden of processing at the mobile station.

Consider **claims 19 and 31** and as applied to claims 18 and 30, Feder et al. that the SLA preference from the service provider prefers a 3G service (read as predetermined communication service; 0052]).

Consider **claims 20 and 32** as applied to claims 18 and 30, Feder et al. as modified by Pecen et al. fail to disclose the predetermined digital communication service comprises a Second Generation (2G) communication service.

In the related field of endeavor, Einola et al. disclose a GSM service (read as second-generation communication service; see pg. 11, lines 23 - 34).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. as modified by

Pecen et al. with the teachings of Einola et al. in order to provide handoff service to and from existing 2G infrastructure and not render the 2G wireless communication network obsolete which would be a waste of resources.

Consider **claims 21 and 33** as applied to claims 18 and 30, Feder et al. as modified by Pecen et al. fail to disclose that the list is sent as part of one of an origination message, a page response message, and a pilot strength measurement message.

In the related field of endeavor, Einola et al. disclose CLASSMARK UPDATE message (read as one of origination message or page response message; see pg. 12, lines 21 - 26).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. as modified by Pecen et al. with the teachings of Einola et al. in order to use an existing technique to conserve resources.

Consider **claims 22 and 34** as applied to claims 18 and 30, Feder et al. disclose various 3G systems including cdma2000 (see [0016]).

Consider **claim 35** as applied to claim 30, Feder et al. as modified by Pecen et al. fail to disclose that serving base station transceiver system utilizes the list of one or more handoff candidate identifiers to select one of the base station transceiver systems for communication with the mobile station.

In the related field of endeavor, Einola et al. disclose the BSC (18) utilizes the CLASSMARK UPDATE message (read as list) when a handover is deemed necessary

and it sends a HARD HANDOVER message containing the UMTS AN CM information (read as identifiers) to the MSC (20) (see pg. 12, line 8 - pg. 13, line 29).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Feder et al. as modified by Pecen et al. with the teachings of Einola et al. in order to use an existing technique to conserve resources.

Conclusion

6. Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fayyaz Alam whose telephone number is (571) 270-1102. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571) 272-7915. The fax phone

number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Fayyaz Alam

August 18, 2006

RAFAEL PEREZ-GUTIERREZ
SUPERVISORY PATENT EXAMINER
8/28/06